

# Foreign Comparative Testing Program

## Twenty Years of Success at Aberdeen Proving Ground

TOM BUONAUGURIO

**W**hat Army program ended a century of dependence on gasoline, introduced three tactical vehicles to the Army, and led to the Type Classification of modern chemical agent detectors across the Services? The answer, revealed in the title of this article, was not a program conceived and directed from the halls of the Pentagon but near the picturesque headwaters of the Chesapeake Bay. For purposes of this article, how fitting that the first shot, signaling the start of Aberdeen Proving Ground's test and evaluation mission, came from a French 75 mm howitzer that is still located at the entrance to this premier Army installation, internationally recognized for research and development, test and evaluation, and soldier training. Although it was fielded by the Army in World War I, long before the phrases Off the Shelf, Non-Developmental Item and Foreign Comparative Testing (FCT) were in vogue, it was a precursor of today's program.

This article promotes the successful Army FCT program, highlights the achievements of the Army FCT management team, and illustrates some of the more remarkable allied systems introduced into the Army's weapon systems inventory. Together, they not only serve today's Army warfighter, but also represent a significant contribution to the next-generation, 21st century Army warfighter, helping to fill key niches in defense material that may otherwise have been delayed or unfilled.

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SCOTT MILLER, ARMY RESEARCH LABORATORY, BRIEFS ARMY LT. GEN. MICHAEL S. DAVISON, JR., DIRECTOR, DEFENSE SECURITY COOPERATION AGENCY, ON THE SNIPER DETECTION SYSTEM.

### Aberdeen Proving Ground, Home of Army FCT

Where is Aberdeen Proving Ground, and why is this the home of Army FCT? Located less than two hours north of Washington, D.C., the installation was founded on the eve of U.S. entry into World War I. Sixty years would pass before Congress formally established the FCT program in 1977. The Army established its FCT team within Headquarters, Test and Evaluation Command because personnel were closely associated with research,

development, and test and evaluation (RDT&E) operations and had a wide range of defense commodity experience.

The majority of the systems evaluated in the past 20 years have historically been European with the United Kingdom (UK), French, and German systems accounting for about half the programs.

Interestingly, these nations are well represented in local history at Aberdeen. The French General La Fayette traveled extensively in the area during the Revolutionary War, and many Germans settled in the area. In 1814, British Navy Rear Adm. Sir George Cockburn sailed the shores of Aberdeen, landing troops

ARMY LT. COL. DIANA DAVIS, PROGRAM MANAGER, FOREIGN COMPARATIVE TESTING (FCT), AND ARMY COL. STEVE REEVES, PROGRAM MANAGER, NBC DEFENSE SYSTEM ARE BRIEFED ON CHEMICAL AGENT MONITOR (CAM) AUTOMATIC CHEMICAL AGENT DETECTOR & ALARM (ACADA) BY ARMY STAFF SGT. WALTER WILLIAMS.



FCT FUNDED THE 40MM PRACTICE AMMUNITION FOR THE MK 19-3 AUTOMATIC GRENADE LAUNCHER. THIS TRAINING AMMUNITION WILL ALLOW REALISTIC, LIVE FIRE TRAINING, BUT REPLACE THE EXPLOSIVE WARHEAD WITH AN ENVIRONMENTALLY FRIENDLY DYE AT 40 PERCENT OF THE COST OF LIVE ROUNDS.



NUCLEAR, BIOLOGICAL, AND CHEMICAL RECONNAISSANCE SYSTEM (NBCRS) RECONNAISSANCE SYSTEM "FOX" (XM93E1) FROM GERMANY, ONE OF THE THREE MOST UNIQUE TACTICAL VEHICLES IN DoD SERVICE, BEGAN ITS EVALUATION THROUGH THE FCT PROGRAM.

Photo courtesy General Dynamics

ated by the Army, via the FCT Program. This continues in the vein of the proud achievements of a legendary Chemical Corps commander, Army Gen. Anthony Macauliff of "Bastogne Nuts" fame, who commanded the Edgewood area of the Proving Ground shortly following the end of World War II.

Three of the most unique tactical vehicles in DoD service began their Army service evaluation through the FCT program:

- Small Unit Support Vehicle from Sweden
- Fox Nuclear, Biological, Chemical Reconnaissance Vehicle from Germany

- Interim Vehicle Mounted Mine Detector, also known as the Chubby (the first ever procurement from the Republic of South Africa).

The Army charged into the 20th century astride the horse, but relied on gasoline as it moved toward a gas-guzzling, horse-powered mechanized force. On the brink of another new century, the Army is moving into the 21st century with the Modern Fuel Burner and 2 kW Generator Set – both from Canada – which may mark the end of gasoline use. The soldier no longer must transport 5-gallon fuel cans of volatile and inherently unsafe fuel in the field, but can instead use standard motor vehicle JP-8 diesel.

When the Army entered World War I in 1917 as part of the American Expeditionary Force, towed artillery was manufactured principally in the UK and

in the vicinity after failing to take Baltimore. After 200 years the locals still differ over the French pronunciations and embrace the British, who didn't cause a serious casualty, but left the state of Maryland with historic landmarks for the tourist industry.

## Successes

What specifically has the FCT program done for the Army over the past 20 years? Most of the modern chemical agent detector projects successfully adopted by the Army, the other military services, and select government agencies were evalu-

France. Fast forward more than 80 years, and our towed 105 mm howitzer is an FCT product of the UK. To accurately deliver these munitions, plus our home-grown 155 mm rounds on target, the Army has fielded another FCT project called the Gun Laying and Positioning System. This product of Switzerland is a vast improvement over earlier systems and gives U.S. warfighters the edge they need when using the queen of the battlefield.

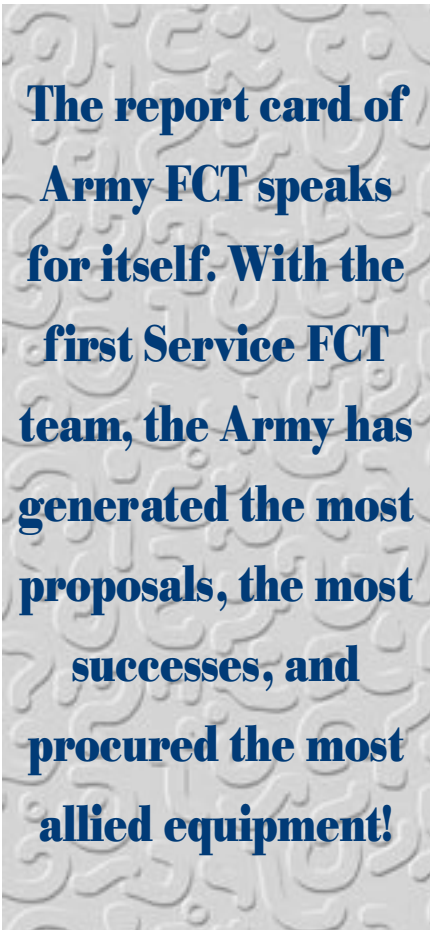
The report card of Army FCT speaks for itself. With the first Service FCT team, the Army has generated the most proposals, the most successes, and procured the most allied equipment! In 20 years, 550 proposals were received, with 151 funded and ultimately 43 bought and fielded.

### **The Process**

The nomination and submission process of the FCT program is straightforward. A proposal is written and submitted by a Program Manager or Research and Development Center to the Army FCT team. The FCT Web site offers the template, examples, points of contact, and key background information invaluable to the sponsor.

The cornerstones of obtaining approval on an FCT proposal are also no secret. A written requirement document, preferably an Operational Requirements Document, is provided along with the results of the market survey. The allied equipment nominated for evaluation must be non-developmental and preferably fielded. The acquisition strategy identifying procurement funds and the fielding plan, assuming successful evaluation, is key. The proposals that receive high priority for funding must cite a cost savings, schedule advantage, or better performance over existing systems. The FCT program does not consider proposals that are primarily for expanding a database, conducting a threat assessment, or technology exploitation.

The format of the proposal is based on a non-developmental acquisition strategy. The FCT project chart depicting the proposed schedule with budget estimate



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is a Gantt chart. Gantt charts, as used in the FCT program, are horizontal bar graphs depicting planned milestones and costs. Coincidentally, Henry Gantt was stationed at Aberdeen right after its establishment in 1917 and developed his [then] novel chart to track the interconnected tasks and milestones of his projects.

### **The Present**

Where is the Army FCT program now? During a January 1999 review, Army Lt. Gen. Michael Davison, Jr., Director, Defense Cooperation Security Agency, saw firsthand the successes and current projects at Aberdeen Proving Ground. The Army is moving aggressively with FCT evaluations across the whole spectrum of commodity areas. Ammunition from Norway, Germany, and Israel; an Acoustic Gunfire Detection System from France; Insensitive Missile Motors from the UK; and much, much, more.

How to use the FCT program is no secret. Sponsors have structured their pro-

posals to evaluate complete systems, major sub-components, and even spare parts. The yearly cycle begins in December with up to 35 proposals eventually received and evaluated. The staff receives approval for 10-12 new starts and continuing projects annually. Funds are released at the start of the new fiscal year. Typical project funding is \$960,000 with an initiation to adoption decision averaging 21 months.

### **The Future**

The Army FCT team of four personnel is half the size it was in 1992. Through aggressive and dedicated team skills and innovation, the team maintains the same level of competitiveness with the other Services for funding. However, September 1999 marks a transition period, as the Aberdeen executive office for FCT closes despite written concerns at all levels.

The Office of the Under Secretary of Defense plans to work with the Army in establishing a new team and process with an eye toward remaining successful and achieving the same standards.

One new noteworthy process, based on a successful demonstration during the FY99-00 cycle, will be a "paperless" Lotus Notes-based application for creating and staffing the proposals. This will significantly enhance the proposal process since all integrated process team members will have access via the Internet. Additionally the Services will benefit since the ease of reviewing the proposals will reduce redundant proposals and possibly lead to more joint programs that are based on similar requirements.

**Editor's Note:** Visit the FCT Web site at <http://www.acq.osd.mil/sts/fct/> to find out more about the FCT program. Also posted are program requirements; procedures on using the new online, Web-based proposal process; and the latest congressional reports, summarizing FCT success stories and projects currently in progress. The author welcomes questions or comments on this article. Contact him at [amxipoi@tecom.army.mil](mailto:amxipoi@tecom.army.mil).